WHAT IS CLAIMED IS:

1. An isolated nucleic acid specific to *Histoplasma capsulatum* comprising:

a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1;

a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1;

a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

a fragment of a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1;

a fragment of a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

a fragment of a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1; or

a fragment of a nucleic acid having a nucleotide sequence which is substantially the same as a nucleic acid which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

wherein the nucleic acid does not contain the nucleotide sequences 5 CGAAGTCGAGGCTTTCAGCATG3 , 5 TATTAGCTCTAGAATTACCACGGGTATCCAAGTAGTAAGG3 , 5 CCCCGAAGGGCATTGGTTTTTTATCTAATAAATACACCCC3 , or nucleotide sequences complementary thereto,

and wherein the nucleic acid is not a nucleic acid

consisting essentially of between 10 and 100 nucleotides which is able to form a hybrid at 60°C with a nucleotide polymer having a nucleotide sequence of 5 CGAAGTCGAGGCTTTCAGCATG3 , 5 CATGCTGAAAGCCTCGACTTCG3 , 5 CAUGCUGAAAGCCUCGACUUCG3 or 5 CGAAGUCGAGGCUUUCAGCAUG3 .

2. The nucleic acid of Claim 1, wherein the nucleic acid has the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

3. The nucleic acid of Claim 1, wherein the nucleic acid has a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

4. The nucleic acid of Claim 1, wherein the nucleic acid has a nucleotide sequence which is substantially the same as a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

5. The nucleic acid of Claim 1, wherein the nucleic acid has a nucleotide sequence which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

6. The nucleic acid of Claim 1, wherein the nucleic acid is a fragment of a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

7. The nucleic acid of Claim 1, wherein the nucleic acid is a fragment of a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

8. The nucleic acid of Claim 1, wherein the nucleic acid is a fragment of a nucleic acid having a nucleotide sequence which is substantially the same as a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

9. The nucleic acid of Claim 1, wherein the nucleic acid is a fragment of a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

10. An isolated or recombinantly-produced antigen specific to *Histoplasma capsulatum* comprising:

a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

a fragment of a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1; or

a fragment of a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

11. The antigen of Claim 10, wherein the antigen is a polypeptide encoded by a nucleic acid having a

nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

12. The antigen of Claim 11, wherein the antigen has an amino acid sequence as set forth in the Sequence Listing as SEQ ID NO:2.

13. The antigen of Claim 10, wherein the antigen is a fragment of a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

14. The antigen of Claim 10, wherein the antigen is a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

15. The antigen of Claim 10, wherein the antigen is a fragment of a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

16. A vector comprising a nucleic acid specific to *Histoplasma capsulatum*, wherein the nucleic acid:

has a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1;

has a nucleotide sequence which is substantially the same as a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1;

is a fragment of a nucleic acid having a nucleotide

sequence as set forth in the Sequence Listing as SEQ ID NO:1; or

is a fragment of a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1;

and wherein the vector is suitable for expressing the nucleic acid.

17. The vector of Claim 16, wherein the nucleic acid has a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

18. The vector of Claim 16, wherein the nucleic acid has a nucleotide sequence which is substantially the same as a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

19. The vector of Claim 16, wherein the nucleic acid is a fragment of a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

20. The vector of Claim 16, wherein the nucleic acid is a fragment of a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

21. A method for detecting a previous or current *Histoplasma capsulatum* infection in a subject, comprising:

(a) contacting a fluid or tissue sample from the subject which contains antibodies with an isolated or recombinantly-produced antigen which is specific to *Histoplasma capsulatum;* and

(b) detecting the presence of binding between the antibodies and the antigen, the presence of binding indicating the presence of a previous or current *Histoplasma capsulatum* infection in a subject,

wherein the antigen is:

a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

a fragment of a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1; or

a fragment of a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

22. The method of Claim 21, wherein the antigen is a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

23. The method of Claim 22, wherein the antigen has an amino acid sequence as set forth in the Sequence Listing as SEQ ID NO:2.

24. The method of Claim 21, wherein the antigen is a fragment of a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

25. The method of Claim 21, wherein the antigen is a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

26. The method of Claim 21, wherein the antigen is a fragment of a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

27. An isolated antibody produced against an antigen of Claim 10.

28. A kit for detecting a previous or current *Histoplasma capsulatum* infection in a sample comprising:

(a) an isolated nucleic acid of Claim 1, an isolated or recombinantly-produced antigen of Claim 10 or an isolated antibody of Claim 27; and

(b) instructions describing the use of the nucleic acid, antigen or antibody in the detection of a previous or current *Histoplasma capsulatum* infection.

29. The kit of Claim 28, wherein the kit contains an antigen, and the antigen is a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

30. The kit of Claim 28, wherein the kit contains an antigen, and the antigen is a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

31. A host for expressing a polypeptide specific to *Histoplasma capsulatum* comprising a vector containing a nucleic acid, wherein the vector is suitable for expressing the nucleic acid, and wherein the nucleic acid:

has a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1;

has a nucleotide sequence which is substantially the same as a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1;

is a fragment of a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1; or

is a fragment of a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

32. The host of claim 31, wherein the nucleic acid has a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

33. The host of Claim 31, wherein the nucleic acid is substantially the same as a nucleic acid having a nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

34. A method for detecting a past exposure to the fungus *Histoplasma capsulatum* comprising:

(a) injecting intradermally in the skin of a patient an effective amount of an isolated or recombinantly-produced antigen which is specific to *Histoplasma capsulatum;* and

(b) observing the skin at the injection site at a predetermined time after injection for a presence of swelling of the skin, the presence of swelling of the skin indicating a past exposure by the patient to the fungus *Histoplasma capsulatum,*

wherein the polypeptide is:

a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

an antigenic fragment of a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1; or

an antigenic fragment of a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

35. The method of Claim 34, wherein the antigen is a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence as set forth in the Sequence Listing as SEQ ID NO:1.

36. The method of Claim 34, wherein the antigen is an antigenic fragment of a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

37. The method of Claim 34, wherein the antigen is a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

38. The method of Claim 34, wherein the antigen is a fragment of a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

39. A vaccine for the prevention of histoplasmosis comprising:

(a) an effective amount of a nucleic acid of claim 1 or an isolated or recombinantly-produced antigen of Claim 10; and

(b) a pharmaceutically-acceptable carrier.

40. A method for detecting a current *H. capsulatum* infection in a subject suspected of having an *H. capsulatum* infection comprising:

(a) contacting a fluid or tissue sample from the subject which contains antigens with antibodies generated against an antigen which contains an epitope which is unique to *H. capsulatum;* and

(b) detecting the presence of binding between the antigens and the antibodies, the presence of binding indicating the presence of a current *H. capsulatum* infection in the subject,

wherein the antigen is:

a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

a fragment of a polypeptide encoded by a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1;

a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1; or

a fragment of a polypeptide encoded by a nucleic acid which is substantially the same as a nucleic acid having a nucleotide sequence which is complementary to the nucleotide sequence set forth in the Sequence Listing as SEQ ID NO:1.

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